

Title (en)  
SURFACE INSPECTION METHOD

Title (de)  
OBERFLÄCHENINSPEKTIONSVERFAHREN

Title (fr)  
PROCÉDÉ DE CONTRÔLE D'UNE SURFACE

Publication  
**EP 3658998 A1 20200603 (FR)**

Application  
**EP 18773792 A 20180723**

Priority  
• FR 1757011 A 20170724  
• FR 2018051888 W 20180723

Abstract (en)  
[origin: WO2019020924A1] The invention relates to a method for inspecting a surface (1) of a workpiece (2) using an image capture device to be mounted on a robot (4), said image capture device (3) comprising a sensor and a lens associated with: an optical centre C, an angular aperture (alpha), and a depth of field (DoF), and defining a sharpness volume (6). The method comprises the following operations: loading a virtual three-dimensional model of the surface (1); generating a virtual three-dimensional model of the sharpness volume (6); tilting the model of the surface (1) using a plurality of unit models of the virtual three-dimensional model of the sharpness volume (6); for each position of the unit models (6), calculating the corresponding position, known as the acquisition position, of the image capture device (3).

IPC 8 full level  
**G05B 19/418** (2006.01); **B25J 9/16** (2006.01)

CPC (source: EP US)  
**B25J 9/1697** (2013.01 - EP US); **G05B 19/41875** (2013.01 - EP); **G06T 17/10** (2013.01 - US); **G01N 2021/9518** (2013.01 - EP); **G05B 2219/37206** (2013.01 - EP); **G05B 2219/40617** (2013.01 - EP); **G05B 2219/50064** (2013.01 - EP); **G05B 2219/50391** (2013.01 - US); **Y02P 90/02** (2015.11 - EP)

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2019020924 A1 20190131**; CN 111065977 A 20200424; CN 111065977 B 20231003; EP 3658998 A1 20200603; FR 3069346 A1 20190125; FR 3069346 B1 20201113; US 2020139552 A1 20200507

DOCDB simple family (application)  
**FR 2018051888 W 20180723**; CN 201880050250 A 20180723; EP 18773792 A 20180723; FR 1757011 A 20170724; US 201816632634 A 20180723